

Motor action at the
carbon-neutral
Wales Rally GB.
© Subaru World
Rally Team



What have Formula One motor racing and farmers in the Mexican State of Chiapas got in common? The answer is that, through trade in "carbon credits", one is funding the other to improve local livelihoods by planting and managing trees.

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ECCM
The Edinburgh Centre for Carbon Management Ltd

iiED

EcoSecurities

Project conducted by the Edinburgh Centre for Carbon Management, the International Institute for Environment and Development and EcoSecurities Ltd

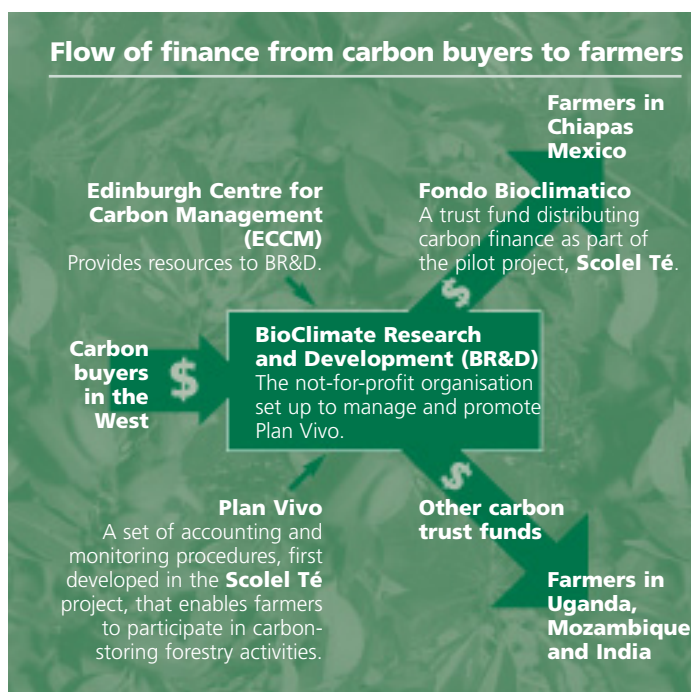
Community forestry gets the credit

Manuel Alvaro is a smallholder farmer in the Mexican State of Chiapas. Thanks to an innovative carbon-trading project, Manuel has received funding to plant trees on 2.5 acres of his land, making a sound investment for the future. Manuel's small woodlot will provide harvestable timber after 25 years and, in the meantime, will help to offset carbon emissions from Formula One motor racing and other polluting activities in the West.

Manuel's Spanish cedar and mahogany trees, and other trees and forests around the world, are important "sinks" for carbon. As atmospheric carbon dioxide accounts for 65 per cent of the now universally acknowledged "greenhouse effect",¹ conserving forests and creating new plantations are important ways of mitigating global climate change.

This concept was first proposed in the 1970s,¹ but only in the Bonn Agreement of the United Nations Framework Convention on Climate Change (UNFCCC) in 2001 did nation states agree to include afforestation and reforestation within the Kyoto Protocol's Clean Development Mechanism (CDM). This mechanism outlines how, to fund certain activities, developing countries can trade carbon credits with more polluting industries in developed countries and emerging economies (the so-called "Annex 1 countries").

Critics have argued that the trading rules of the CDM could disadvantage vulnerable communities, which might be displaced from their traditional lands to make way for large-scale commercial plantations.² In order to address these concerns, the UK Department for International



Development's (DFID) Forestry Research Programme (FRP) funded the Edinburgh Centre for Carbon Management (ECCM), the International Institute for Environment and Development (IIED) and EcoSecurities Ltd to carry out a series of research projects centred on smallholder forestry activities in the State of Chiapas in tropical Mexico.

By investigating how carbon trading can fund small-scale forestry projects that benefit rural communities, the FRP-funded research complies with Goals 1 and 7 of the UN Millennium Development Goals; namely to "eradicate extreme hunger and poverty" and to "ensure environmental sustainability". It also contributes directly to the policy development process of the UNFCCC, which called for pilot projects that deliver sustainable development and reduce emissions of greenhouse gases.

Developing an administrative framework

To test and develop an administrative framework for channelling carbon credit finance into community forestry, a research team based at ECCM implemented a pilot

project called Scolec Té ("the tree that grows" in the local language). This project provided a link between Mexican farmers' organisations and, initially, the Fédération Internationale de l'Automobile (FIA), which has purchased Voluntary Emission Reductions (VERs) amounting to 5,000 tonnes of carbon per year. These VERs have offset greenhouse gas emissions from the Formula One championships since 1997 and the World Rally championships since 2001.³⁻⁴

The 2003 price of a VER was US\$13, calculated by the research team as the average cost of long-term forest management per tonne of carbon stored in woody vegetation.⁴ VERs are purchased via the Scolec Té project trust fund, the Fondo Bioclimatico. Through further research and development at ECCM, this system was extended to cover several communities in Chiapas and the neighbouring State of Oaxaca. Purchasers of carbon offsets for this project include the UK carbon brokers Future Forests, the World Economic Forum, the rock band Pink Floyd, and the World Bank.⁵

An important component of the Scolec Té pilot project was a set of accounting and monitoring procedures to facilitate the participation of farmers in carbon-storing forestry activities. The system devised was called "Plan Vivo" ("the living plan") and is used by the 30 communities participating in the Scolec Té project.

The research team at ECCM also developed a set of preliminary standards for carbon offset forestry. These standards, which were the first protocol on carbon trading and forestry to take account of the needs of small farmers, were submitted to the International Federation for Carbon Sequestration.³ More recently, ECCM has been working with the United Nations Environment Programme (UNEP) and the World Conservation Union (IUCN) on the

creation of the "3 Conventions Partnership", linking the three United Nations Conventions on Climate Change, Biodiversity and Desertification. This partnership aims to provide an international framework for strengthening the market for environmental services, including carbon trading, and making it more accessible to small-scale project developers.

Supporting local economies

Through the Scolel Té project, annual sales of carbon in southern Mexico rose from approximately 5,000 tonnes in 1997 to 15,000 tonnes in 2003, enabling more than 600 farmers to engage in forestry activities such as agroforestry and the restoration of forests damaged by fire.

The Plan Vivo system employed in Scolel Té has been promoted to forestry organisations, financing institutions and local non-governmental organisations (NGOs) around the world. The research team organised a series of local, national and international workshops and training sessions, and produced an online manual, available at www.planvivo.org. In 2002, a not-for-profit company called BioClimate Research and Development was established to manage and promote the Plan Vivo system and ensure continued development in the future.

"If these cedros grow as well as the ones in the next village, then by the time my son is old enough to go to college, they should be worth enough to pay for his fees and upkeep."

Manuel Alvaro, Muquenal, Chiapas, Mexico

As a result of FRP funding for the development of the Plan Vivo carbon management system, the India-based NGO, Women for Sustainable Development,

is working with local farmers on water management, agroforestry and small-scale bioenergy plants. In its first two years, the project enabled 70 farmers to sell around 2,000 tonnes of carbon to fund new mango and tamarind orchards.⁶



*Residents of the Nhambita Community in Mozambique grow tree seedlings for use in a Plan Vivo project.
© Jessica Orrego, ECCM*

Other projects under development include the Nhambita Community Carbon Project, which will use carbon finance to plant trees and protect existing forest in the buffer zone of the Gorongosa National Park in Mozambique. And, in the Bushenyi District of south western Uganda, small-scale farmers are using carbon finance to plant local woodlots.

To ensure that research recommendations are translated into action on a wider scale, FRP funded IIED to produce a booklet relating the ways in which poor communities can benefit from carbon offset payments.⁶ IIED also organised an international workshop, which was held in Edinburgh in September 1999 and was attended by researchers, policy makers and project managers. In addition, FRP funded EcoSecurities Ltd to produce a booklet designed specifically for policy makers and development organisations in developing countries.⁷ This publication, and the related web site www.cdmcapacity.org, explain how the Clean Development Mechanism

can be used to finance forestry and other land use activities.

Creating sustainable livelihoods

The FRP-funded research on using carbon finance to fund community forestry is rooted in the core principles of the Sustainable Livelihoods Approach (SLA) advocated by DFID. Firstly, the research is **people-centred**, concentrating on how carbon management can address the needs of small-scale farmers. Secondly, the research **responds** directly to the requirements of policy makers. For example, the World Bank and the Global Environment Facility (GEF) both called for work relating to standards and procedures for assessing and regulating carbon offset projects.

An important component of the carbon management research was the **participation** of local farmers. By exemplifying how small-scale forestry can help solve problems of global climate change, the research also took a **multi-level** approach, reporting to policy makers at UNFCCC, GEF, the UN Food and Agriculture Organization (FAO), DFID and other key players.

The carbon management pilot projects were themselves a **partnership** with various organisations including the Mexican environmental co-operative AMBIO, local farmers' organisations such as the Unión de Crédito Pajal, the Mexican National Institute of Ecology (INE) and the research organisation El Colegio de la Frontera Sur (ECOSUR). Most importantly, the FRP-funded research demonstrates an inherently **sustainable** approach, in which forestry

projects supported by carbon trading can benefit both indigenous farming communities and the local forest resource.

Finally, the research carried out by ECCM, IIED and EcoSecurities Ltd recognises that policy regarding the mitigation of global climate change is a **dynamic** playing field. For example, the conservation and management of existing forests are not currently included in the CDM, but the Plan Vivo system demonstrates that a variety of carbon management projects (CDM compliant or otherwise) can benefit local livelihoods and ecosystems if the principles of sustainable development are in place. The FRP-funded research therefore remains a crucial test bed for carbon trading that tackles simultaneously global climate change, forest conservation and local economic development.

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